

Appln No. 10/817,297

Amdt date January 6, 2005

Reply to Office action of September 8, 2004

REMARKS/ARGUMENTS

Claims 1-28 are pending in this application. In view of the following remarks, applicants submit that all of pending claims 1-28 are in condition for allowance. Accordingly, applicants respectfully request reconsideration and a timely indication of allowance.

In the Office action dated September 8, 2004, the examiner rejected claims 1-25 for double patenting under 35 U.S.C. § 101 as allegedly unpatentable over U.S. Patent No. 6,750,036 ("the '036 patent"). However, applicants note that the claims of the present application recite limitations not recited in the '036 patent. Specifically, claim 1 of the '036 patent recites as follows:

1. A method of monitoring cellular activity in a cellular specimen, comprising:

applying a plurality of different excitable markers to the specimen;

focusing light upon a region of the specimen from a laser microscope to excite the markers in the region and cause fluorescence to be radiated by the markers in the region;

separating the fluorescence into wavelength bands using a *spectral analyzer*;

detecting the fluorescence through an array of detectors, with each detector receiving one of the wavelength bands; and

analyzing the detected fluorescence to identify the presence of a contribution to the fluorescence from each of the plurality of different excitable markers. (Emphasis added).

Appln No. 10/817,297

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In contrast, claim 1 of the present application recites as follows:

1. A method of monitoring cellular activity in a cellular specimen, comprising:

applying a plurality of different excitable markers to the specimen;

focusing light upon a region of the specimen from a laser microscope to excite the markers in the region and cause fluorescence to be radiated by the markers in the region;

separating the fluorescence into wavelength bands using a *tunable filter*;

detecting the fluorescence through an array of detectors, with each detector receiving one of the wavelength bands and *generating a corresponding signal*; and

analyzing the detected fluorescence to *qualitatively and quantitatively* identify the contribution to the fluorescence from each of the plurality of different excitable markers. (Emphasis added).

As can be seen from the above comparison, claim 1 of the present application recites the use of a tunable filter in place of the spectral analyzer claimed in the '036 patent. Also, claim 1 of the present application includes an additional limitation in the detecting the fluorescence step, namely that each detector generates a signal corresponding to the received wavelength band. This limitation is not found in the claims of the '036 patent. In addition, claim 1 of the present application recites the qualitative and quantitative identification of the contribution to the fluorescence from each

Appln No. 10/817,297

Amdt date January 6, 2005

Reply to Office action of September 8, 2004

excitable marker. No such limitation is recited in the claims of the '036 patent.

Similarly, differences exist between claim 14 of the '036 patent (the only other independent claim in that patent) and claim 14 of the present application. Claim 14 of the '036 patent recites as follows:

14. A system for monitoring cellular activity in a cellular specimen that contains a plurality of excitable markers, the system comprising:

a laser microscope that is operative to excite the markers in a region of the specimen, wherein the markers in the region radiate fluorescence as a result;

a tunable filter that is operative to process the fluorescence and to pass a portion of the fluorescence, wherein the portion of the fluorescence is within a wavelength band that depends on the setting of the filter;

a detector that is operative to receive the processed fluorescence and to convert the fluorescence into a corresponding signal; and

an analyzer that is operative to receive the signal and identify the presence of a contribution to the signal from each of the plurality of different excitable markers. (Emphasis added).

In contrast, claim 14 of the present application recites as follows:

14. A system for monitoring cellular activity in a cellular specimen that contains a plurality of excitable markers, the system comprising:

Appln No. 10/817,297

Amdt date January 6, 2005

Reply to Office action of September 8, 2004

a laser microscope that is operative to excite the markers in a region of the specimen, wherein the markers in the region radiate fluorescence as a result;

a tunable filter that is operative to process the fluorescence and to pass a portion of the fluorescence, wherein the portion of the fluorescence is within a wavelength band that depends on the setting of the filter;

a plurality of detectors operative to receive the processed fluorescence and to convert the fluorescence into a corresponding plurality of signals; and

an analyzer that is operative to receive the signal and to qualitatively and quantitatively identify the contribution to the fluorescence from each of the plurality of different excitable markers.

As can be seen from the above comparison, claim 14 of the present application recites the use of a plurality of detectors rather than a single detector as claimed in the '036 patent. Furthermore, the combination of a tunable filter and a plurality of detectors is not recited in any claim of the '036 patent. Also, claim 14 of the present application recites an analyzer which qualitatively and quantitatively identifies the contribution to the fluorescence from each excitable marker. No such limitation is recited in the claims of the '036 patent. Accordingly, applicants respectfully request withdrawal of the double patenting rejection under 35 U.S.C. § 101.

The examiner also rejected claims 1-25 under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over U.S. Patent No. 6,403,332. In that

Appln No. 10/817,297

Amdt date January 6, 2005

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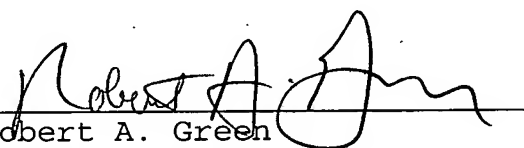
regard, applicants intend to file a Terminal Disclaimer in compliance with 37 C.F.R. 1.321(c) upon withdrawal of the remaining objections. Accordingly, applicant requests withdrawal of this rejection.

For all of the foregoing reasons, applicants respectfully submit that all of pending claims 1-28 are in condition for allowance. Applicants, therefore, respectfully request a timely indication of allowance. If there are any remaining issues that can be addressed by telephone, applicants invite the examiner to contact the undersigned at the number indicated below.

Respectfully submitted,

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By


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